AMENDMENT TO THE CLAIMS:

The following listing of claims replaces all prior listings of claims in this application.

1. – 10. (Canceled)

11. (Previously Presented) A method for providing Ethernet VLAN capacity requirement estimation, said method comprising:

receiving a VLAN including VLAN access ports, VLAN switches and VLAN trunks, wherein said VLAN access ports include VLAN bandwidth requirements and VLAN class of service and said VLAN trunks include VLAN capacity counters and VLAN threshold parameters;

receiving a target access port, said target access port including a target class of service and a target bandwidth requirement from a requestor;

determining a target trunk and target switch corresponding to said target access port, wherein said target trunk corresponds to one of said VLAN trunks and said target switch corresponds to one of said VLAN switches;

calculating a bandwidth contribution of said target access port to said VLAN, said calculating responsive to said VLAN trunks, said VLAN switches, said VLAN access ports, and said target access port; and

transmitting said bandwidth contribution to said requestor;

wherein said calculating a bandwidth contribution of said target access port to said VLAN includes:

splitting said VLAN into two portions based on the location of said VLAN switches relative to said target trunk, wherein one portion includes said target access port and is an access port side and the other portion is a non-access port side;

calculating a current access port side bandwidth requirement responsive to said VLAN;

calculating a potential access port side bandwidth requirement responsive to said

VLAN and to said target access port;

calculating a current non-access port bandwidth requirement responsive to said VLAN; and

determining said bandwidth contribution of said target access port by subtracting the minimum of said current access port side bandwidth requirement compared to said current non-access port bandwidth requirement from the minimum of said potential access port side bandwidth requirement compared to said current non-access port bandwidth requirement.

12. – 15. (Canceled)

16. (Currently Amended) A system for providing Ethernet VLAN capacity requirement estimation, the system comprising:

~~a network;~~

~~a storage device in communication with said network, wherein said storage device includes a VLAN database;~~

~~a user system in communication with said network; and~~

a host system in communication with a storage device including a VLAN database and said host system in communication with a user system via~~said~~ a network, said host system including application software to implement a method comprising:

receiving a VLAN stored in said VLAN databases, said VLAN including VLAN access ports, VLAN switches and VLAN trunks, wherein said VLAN access ports include VLAN bandwidth requirements and VLAN class of service and said VLAN trunks include VLAN capacity counters and VLAN threshold parameters;

receiving a target access port via said network, said target access port including a target class of service and a target bandwidth requirement from a requestor using said user system;

determining a target trunk and target switch corresponding to said target

access port, wherein said target trunk corresponds to one of said VLAN trunks and said target switch corresponds to one of said VLAN switches;

calculating a bandwidth contribution of said target access port to said VLAN, said calculating responsive to said VLAN trunks, said VLAN switches, said VLAN access ports, and said target access port; and

transmitting said bandwidth contribution via said network to said requestor;

wherein said calculating the bandwidth contribution of said target access port to said VLAN includes:

splitting said VLAN into two portions based on the location of said VLAN switches relative to said target trunk, wherein one portion includes said target access port and is an access port side and the other portion is a non-access port side;

calculating a current access port side bandwidth requirement responsive to said VLAN;

calculating a potential access port side bandwidth requirement responsive to said VLAN and to said target access port;

calculating a current non-access port bandwidth requirement responsive to said VLAN; and

determining said bandwidth contribution of said target access port by subtracting the minimum of said current access port side bandwidth requirement compared to said current non-access port bandwidth requirement from the minimum of said potential access port side bandwidth requirement compared to said current non-access port bandwidth requirement~~and calculating bandwidth contribution for the access port side and the non-access port side~~.

17. (Original) The system of claim 16 wherein said network is the Internet.

18. (Original) The system of claim 16 wherein said network in an intranet.

19. (Original) The system of claim 16 wherein said VLAN database is a relational database.

20. (Currently Amended) A computer program product for providing Ethernet VLAN capacity requirement estimation, the computer program product comprising:

a storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for facilitating a method comprising:

receiving a VLAN including VLAN access ports, VLAN switches and VLAN trunks, wherein said VLAN access ports include VLAN bandwidth requirements and VLAN class of service and said VLAN trunks include VLAN capacity counters and VLAN threshold parameters;

receiving a target access port, said target access port including a target class of service and a target bandwidth requirement from a requestor;

determining a target trunk and target switch corresponding to said target access port, wherein said target trunk corresponds to one of said VLAN trunks and said target switch corresponds to one of said VLAN switches;

calculating a bandwidth contribution of said target access port to said VLAN, said calculating responsive to said VLAN trunks, said VLAN switches, said VLAN access ports, and said target access port; and

transmitting said bandwidth contribution to said requestor;

wherein said calculating the bandwidth contribution of said target access port to said VLAN includes:

splitting said VLAN into two portions based on the location of said VLAN switches relative to said target trunk, wherein one portion includes said target access port and is an access port side and the other portion is a non-access port side;

calculating a current access port side bandwidth requirement responsive to said VLAN;

calculating a potential access port side bandwidth requirement responsive to said VLAN and to said target access port;

calculating a current non-access port bandwidth requirement responsive to said VLAN; and

determining said bandwidth contribution of said target access port by subtracting the minimum of said current access port side bandwidth requirement compared to said current non-access port bandwidth requirement from the minimum of said potential access port side bandwidth requirement compared to said current non-access port bandwidth requirement ~~and calculating bandwidth contribution for the access port side and the non-access port side~~.

21. (Previously Presented) The method of claim 11 further comprising:

adding said bandwidth contribution to a target capacity counter corresponding to said target trunk resulting in a target capacity;

transmitting an alert in response to said target capacity exceeding a target threshold corresponding to said target trunk.

22. (Previously Presented) The method of claim 21 wherein said target threshold is an alarm threshold.

23. (Previously Presented) The method of claim 21 wherein said target threshold is a cut-off threshold.

24. (Previously Presented) The method of claim 21 further comprising updating said target capacity counter with said target capacity and adding said target access port to said VLAN in response to said target capacity not exceeding said target threshold.

25. (Previously Presented) The method of claim 21 wherein said target threshold varies based on said target class of service.

26. (Previously Presented) The method of claim 21 wherein said target capacity varies based on said target class of service.

27. (Previously Presented) The method of claim 11 wherein said target class of service is best effort.

28. (Previously Presented) The method of claim 11 wherein said target class of service is committed bandwidth.

29. (Previously Presented) The method of claim 11 wherein said target class of service is priority plus.